condition of education 2002



INDICATOR 31

Academic Background of College Graduates Who Enter and Leave Teaching

The indicator and corresponding tables are taken directly from *The Condition of Education 2002*. Therefore, the page numbers may not be sequential.

Additional information about the survey data and supplementary notes can be found in the full report. For a copy of *The Condition of Education 2002*, visit the NCES web site (http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002025) or contact ED PUBs at 1-877-4ED-PUBS.

Suggested Citation:

U.S. Department of Education, National Center for Education Statistics, *The Condition of Education* 2002, NCES 2002-025, Washington, DC: U.S. Government Printing Office, 2002.

NATIONAL CENTER FOR EDUCATION STATISTICS

Teachers

Academic Background of College Graduates Who Enter and Leave Teaching

College students with low college entrance examination scores are more likely than students with high scores to prepare to become teachers and to enter the teaching profession. They are also more likely than their high-scoring peers to remain in the teaching profession.

Many studies show that students learn more from teachers with strong academic skills than they do from teachers with weak academic skills (Ballou 1996; Ehrenberg and Brewer 1994, 1995; Ferguson and Ladd 1996). However, studies of teachers' academic qualifications reveal that college graduates with the lowest college entrance examination (i.e., SAT or ACT) scores are more inclined to become K-12 teachers than those with the highest scores (NCES 2001–030). Using SAT or ACT scores as a proxy for academic caliber, this indicator compares academically weak and strong 1992-93 college graduates with regard to selected features of their teaching careers.

Graduates who scored in the bottom quartile of SAT or ACT scores were more likely than those in the top quartile to have taught before 1997 (14 versus 10 percent) and about twice as likely to predict that they would be teaching full time by 2000 (10 versus 4 percent). They were also more likely to have majored in education (15 versus 7 percent) as well as have prepared to teach," * regardless of whether they actually taught (12 versus 6 percent) or not (6 versus 3 percent) (see supplemental table 31-1).

Among graduates who became teachers, those who scored in the bottom quartile were more likely than those in the top quartile to have taught only in elementary schools, only in public schools, and in schools where 50 percent or more of children were eligible for free or reduced-price lunch. Those who scored in the top quartile were more likely than those in the bottom quartile to have taught only in secondary schools as well as only in private schools. In fact, the percentage of graduates who taught only in secondary schools and who scored in the top half is not statistically different from the average for all graduates (or 50 percent) (see supplemental table 31-3). Among graduates who became teachers, school location, size, and rates of minority enrollment were not significant factors distinguishing those in the bottom quartile from those in the top quartile (see supplemental table 31-2).

Among graduates who became teachers, those who scored in the bottom quartile were more likely than those in the top quartile to still be teaching in 1997 (84 versus 68 percent) (see supplemental table 31-2).

*Graduates classified as "prepared to teach" had completed a student-teaching assignment or had earned a teaching certificate.

NOTE: The "teacher pipeline" is an analytic framework that organizes graduates by the number of steps they have taken to become teachers. "Pipeline-eligible" refers to all graduates who were not teachers before receiving their bachelor's degree. "Entering the pipeline" refers to taking some steps to become a teacher.

SOURCE: Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/ 1997).



FOR MORE INFORMATION: Supplemental Notes 1, 8 Supplemental Tables 31-1, 31-2, 31-3 NCES 96-899; NCES 2000-

Marco, Abdel-Fattah, and Baron 1992; Ehrenberg and Brewer 1994, 1995; Ballou 1996; Ferguson and Ladd 1996

152; NCES 2001-030



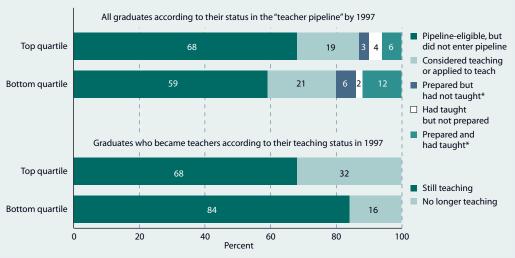


Table 31-1 Percentage distributions of 1992–93 bachelor's degree recipients according to availability of scores and the quartile ranking of their college entrance examination score, by graduate characteristics: 1997

		Graduates with	Of graduates with scores available, percentage whose scores ranked in the		
Graduate characteristics	Total	scores available ¹	Bottom quartile	Middle half	Top quartile
Status in teacher pipeline by 1997 ²	100.0				
Pipeline-eligible, but did not enter pipeline ²	63.7	63.8	59.0	64.2	67.7
Considered teaching or applied to teach	19.2	18.7	20.8	17.5	19.3
Prepared but had not taught ³	4.5	4.6	5.7	4.7	3.2
Had taught	12.7	12.9	14.5	13.7	9.8
Had taught but not prepared ³	2.5	2.6	2.3	2.2	3.8
Prepared and had taught ³	10.1	10.3	12.2	11.5	6.0
Employment expectations in next 3 years	100.0				
Teaching full time	7.6	7.6	10.1	7.9	4.4
Nonteaching full-time work	83.7	84.2	83.0	83.8	86.1
Not working full time	8.8	8.3	7.0	8.3	9.5
Baccalaureate major	100.0				
Education	11.7	12.2	14.7	13.4	7.2
Business/management	25.2	23.9	25.9	25.8	17.8
Humanities	9.8	10.2	9.0	9.3	13.4
Mathematics/computer/natural sciences	19.6	20.8	11.6	19.6	32.4
Social science	15.2	15.6	15.2	15.3	16.8
Other	18.4	17.3	23.6	16.7	12.4

Includes SAT scores, institution, or self-reported SAT scores. When SAT scores were not available, ACT scores were used. See the glossary for details.

"The "teacher pipeline" is an analytic framework that organizes graduates by the number of steps they have taken to become teachers. "Pipeline-eligible" refers to all graduates who were not teachers before receiving their bachelor's degree. "Entering the pipeline" refers to taking some steps to become a teacher.

³Graduates classified as "prepared to teach" had completed a student-teaching assignment or had earned a teaching certificate.

NOTE: Excludes graduates who had already been teachers before receiving their bachelor's degree in 1992-93. SAT/ACT scores were available for 77 percent of these graduates. The similarity of the distributions for graduates with available scores and total graduates suggests that there is little or no resulting bias from unavailable scores. Percentages may not add to 100.0 due to rounding. SOURCE: U.S. Department of Education, NCES. Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

Table 31-2 Percentage distributions of 1992–93 bachelor's degree recipients who taught in elementary or secondary schools before 1997 according to availability of scores and the quartile ranking of their college entrance examination score, by selected characteristics of teachers' careers: 1997

		Graduates with	percentage	ates with scores ava	
Characteristics of K-12 teachers' careers	Total	scores available*	Bottom quartile	Middle half	Top quartile
By 1997 had taught	100.0				
Only in public schools	83.2	81.5	84.6	84.0	69.4
Only in private schools	13.1	14.4	10.4	12.5	25.9
Both in public and private schools	3.8	4.0	4.9	3.4	4.7
By 1997 had taught	100.0				
Only in elementary school(s)	52.3	51.2	57.9	51.5	40.3
Only in secondary school(s)	30.7	31.4	28.2	29.0	44.0
Only in combined school(s)	4.5	4.9	3.8	5.5	4.6
In a mix of these school levels	12.4	12.5	10.2	14.0	11.1
Had taught most recently in	100.0				
Central city	33.3	32.6	34.0	30.5	37.3
Urban fringe or large town	28.4	28.7	24.9	31.1	26.6
Small town or rural area	38.3	38.7	41.1	38.4	36.1
Had taught most recently at					
school with enrollment of	100.0				
Less than 300	18.2	17.5	18.6	16.8	18.3
300–999	63.9	64.3	62.8	68.9	51.5
1,000 or more	17.9	18.1	18.6	14.4	30.2
Had taught most recently at school					
with minority enrollment of	100.0				
Less than 10 percent	31.3	30.8	25.9	31.3	36.6
10-24 percent	18.6	18.0	18.8	17.0	20.7
25–49 percent	17.8	19.1	21.5	17.8	20.2
50-75 percent	15.7	17.4	18.2	19.0	10.1
More than 75 percent	16.7	14.7	15.6	14.9	12.4
Had taught most recently at school with percent	entage				
of students in the school lunch program	100.0				
Less than 15 percent	27.2	30.7	27.9	29.9	40.5
15-29 percent	25.1	24.4	18.9	27.5	23.3
30-49 percent	22.0	21.2	22.7	19.2	26.3
50-74 percent	14.5	14.8	15.6	16.7	4.3
75-100 percent	11.2	9.1	14.9	6.8	5.7
Teaching status in 1997	100.0				
Still teaching	79.4	78.4	83.9	79.4	67.9
No longer teaching	20.7	21.6	16.1	20.6	32.1
-					

^{*}Includes SAT scores, institution, or self-reported SAT scores. When SAT scores not were available, ACT scores were used. See the glossary for details.

NOTE: Excludes graduates who had already been teachers before receiving their bachelor's degree in 1992–93. SAT/ACT scores were available for 77 percent of these graduates. The similarity of the distributions for graduates with available scores and total graduates suggests that there is little or no resulting bias from unavailable scores. Percentages may not add to 100.0 due to rounding. SOURCE: U.S. Department of Education, NCES. Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

Table 31-3 Percentage distribution of all 1992–93 bachelor's degree recipients and those who taught in elementary or secondary schools before 1997 according to whether their college entrance examination scores were available, and the percentage whose available scores were in the top half of their peer group, by selected characteristics of teachers' careers: 1997

	Of all graduates, perc	entage with scores*		
Characteristics of K-12 teachers' careers	Unavailable	Available	Top half	
Total of all 1992–93 graduates	20.4	79.6	49.6	
By 1997 had taught				
Only in public schools	20.2	79.8	40.9	
Only in private schools	10.1	89.9	53.0	
Both in public and private schools	12.9	87.1	41.3	
By 1997 had taught				
Only in elementary school(s)	20.0	80.0	34.5	
Only in secondary school(s)	16.5	83.6	52.9	
Only in combined school(s)	11.6	88.4	43.0	
In a mix of these school levels	17.3	82.7	47.5	
Had taught most recently in				
Central city	20.2	79.8	40.0	
Urban fringe or large town	17.3	82.7	43.5	
Small town or rural area	17.6	82.4	43.1	
Had taught most recently at				
school with enrollment of				
Less than 300	21.7	78.3	46.8	
300-999	18.1	81.9	37.7	
1,000 or more	17.4	82.6	51.3	
Had taught most recently at school				
with minority enrollment of				
Less than 10 percent	21.5	78.5	45.4	
10-24 percent	22.4	77.6	37.7	
25-49 percent	13.9	86.1	41.1	
50-75 percent	11.3	88.7	39.6	
More than 75 percent	30.0	70.0	40.0	
Had taught most recently at school with percentage				
of students in the school lunch program				
Less than 15 percent	9.2	90.8	42.6	
15–29 percent	23.4	76.6	45.2	
30-49 percent	23.9	76.2	32.9	
50-74 percent	18.1	81.9	41.5	
75–100 percent	36.8	63.2	26.8	
Teaching status in 1997				
Still teaching	17.3	82.7	39.9	
No longer teaching	12.6	87.4	54.1	

*Includes SAT scores, institution, or self-reported SAT scores. When SAT scores were not available, ACT scores were used. See the glossary for details. NOTE: Excludes graduates who had already been teachers before receiving their bachelor's degree in 1992–93. Percentages may not add to 100.0 due to rounding. SOURCE: U.S. Department of Education, NCES. Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

Table S31 Standard errors for the percentage distribution of all 1992–93 college graduates and those who became teachers, in the top and bottom quartile of SAT or ACT scores

Characteristics of graduates	Top quartile	Bottom quartile
All graduates according to their status in the "teacher pipeline" by	1997	
Pipeline-eligible, but did not enter pipeline	1.4	1.5
Considered teaching or applied to teach	1.2	1.4
Prepared but had not taught	0.6	0.8
Had taught but not prepared	0.5	0.4
Prepared and had taught	0.6	0.8
Graduates who became teachers according to their teaching statu	s in 1997	
Still teaching	4.1	2.8
No longer teaching	4.1	2.8
SOURCE: U.S. Department of Education, NCES, Baccalaureate and Beyond Longitudinal Study."	Second Follow-un" (R&R:1993/1997)	

Table S31-1 Standard errors for the percentage distributions of 1992–93 bachelor's degree recipients according to availability of scores and the quartile ranking of their college entrance examination score, by graduate characteristics: 1997

		Graduates with	J	Of graduates with scores available, percentage whose scores ranked in the	
Graduate characteristics	Total	scores available	Bottom quartile	Middle half	Top quartile
Status in teacher pipeline by 1997	(†)				
Pipeline-eligible, but did not enter pipeline	0.7	0.7	1.5	1.0	1.4
Considered teaching or applied to teach	0.6	0.6	1.4	0.8	1.2
Prepared but had not taught	0.3	0.3	0.8	0.4	0.6
Had taught	0.5	0.5	0.8	0.7	0.8
Had taught but not prepared	0.2	0.2	0.4	0.2	0.5
Prepared and had taught	0.4	0.5	0.8	0.6	0.6
Employment expectations in next 3 years	(†)				
Teaching full time	0.3	0.4	0.7	0.6	0.5
Nonteaching full-time work	0.5	0.5	1.0	0.8	1.0
Not working full time	0.4	0.4	0.7	0.6	0.8
Baccalaureate major	(†)				
Education	0.4	0.5	1.0	0.7	0.7
Business/management	0.8	0.7	1.7	1.0	1.4
Humanities	0.5	0.5	0.8	0.7	1.0
Mathematics/computer/natural sciences	0.6	0.7	1.0	0.9	1.5
Social science	0.6	0.6	1.1	0.8	1.2
Other	0.7	0.7	1.5	0.9	1.0

SOURCE: U.S. Department of Education, NCES. Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

Table S31-2 Standard errors for the percentage distributions of 1992–93 bachelor's degree recipients who taught in elementary or secondary schools before 1997 according to availability of scores and the quartile ranking of their college entrance examination score, by selected characteristics of teachers' careers: 1997

UI LEAGHETS CALEETS. 1777						
			Of graduates with scores available,			
			Graduates with percentage whose scores			
Characteristics of K–12 teachers' careers	Total	scores available	Bottom quartile	Middle half	Top quartile	
By 1997 had taught	(†)					
Only in public schools	1.4	1.6	3.2	2.1	5.3	
Only in private schools	1.2	1.5	2.8	1.9	5.2	
Both in public and private schools	0.7	0.8	2.0	1.0	1.7	
By 1997 had taught	(†)					
Only in elementary school(s)	1.9	2.2	4.1	3.0	5.0	
Only in secondary school(s)	2.0	2.2	4.0	2.7	5.5	
Only in combined school(s)	0.7	0.8	1.4	1.1	1.8	
In a mix of these school levels	1.5	1.7	2.7	2.5	4.1	
Had taught most recently in	(†)					
Central city	2.1	2.2	4.4	2.8	5.2	
Urban fringe or large town	1.9	2.1	3.4	2.8	3.8	
Small town or rural area	2.1	2.3	4.1	2.8	5.5	
Had taught most recently at school with enrollment o	f (†)					
Less than 300	1.7	1.7	3.0	2.0	4.2	
300-999	2.0	2.1	4.2	2.4	4.9	
1,000 or more	1.6	1.7	3.4	1.9	4.9	
Had taught most recently at school						
with minority enrollment of	(†)					
Less than 10 percent	2.6	2.6	3.6	3.7	6.0	
10-24 percent	1.7	1.7	2.9	2.3	5.0	
25-49 percent	1.8	2.2	3.6	2.7	4.7	
50-75 percent	1.9	2.2	3.8	3.3	2.7	
More than 75 percent	2.2	2.4	3.2	3.0	4.2	
Had taught most recently at school with						
percentage of students in the school lunch program	(†)					
Less than 15 percent	2.4	2.6	4.8	3.8	7.4	
15–29 percent	2.1	2.1	3.4	3.1	5.7	
30–49 percent	2.2	2.3	4.3	2.4	7.7	
50-74 percent	1.9	2.3	3.7	3.5	2.4	
75–100 percent	1.9	1.9	4.0	2.2	2.9	
Teaching status in 1997	(†)					
Still teaching	1.5	1.6	2.8	2.1	4.1	
No longer teaching	1.5	1.6	2.8	2.1	4.1	
<u> </u>						

†Not applicable.

SOURCE: U.S. Department of Education, NCES. Baccalaureate and Beyond Longitudinal Study, "Second Follow-up" (B&B:1993/1997).

Table S31-3 Standard errors for the percentage distribution of all 1992–93 bachelor's degree recipients and those who taught in elementary or secondary schools before 1997 according to whether their college entrance examination scores were available, and the percentage whose available scores were in the top half of their peer group, by selected characteristics of teachers' careers: 1997

	Of all graduates, per			
Characteristics of K–12 teachers' careers	Unavailable	Available	Top half	
Total of all 1992–93 graduates	0.8	0.8	1.2	
By 1997 had taught				
Only in public schools	2.4	2.4	2.5	
Only in private schools	2.7	2.7	5.5	
Both in public and private schools	6.5	6.5	8.4	
By 1997 had taught				
Only in elementary school(s)	2.3	2.3	3.1	
Only in secondary school(s)	3.4	3.4	4.5	
Only in combined school(s)	4.7	4.7	8.4	
In a mix of these school levels	5.5	5.5	6.7	
Had taught most recently in				
Central city	3.5	3.5	4.4	
Urban fringe or large town	3.1	3.1	3.6	
Small town or rural area	2.2	2.2	3.5	
Had taught most recently at				
school with enrollment of				
Less than 300	4.5	4.5	4.9	
300-999	2.1	2.1	2.8	
1,000 or more	4.5	4.5	5.2	
Had taught most recently at school				
with minority enrollment of				
Less than 10 percent	4.0	4.0	4.1	
10-24 percent	4.8	4.8	5.5	
25–49 percent	2.9	2.9	4.6	
50-75 percent	3.6	3.6	5.7	
More than 75 percent	6.7	6.7	7.7	
Had taught most recently at school with percentage				
of students in the school lunch program				
Less than 15 percent	2.3	2.3	4.9	
15–29 percent	4.5	4.5	6.0	
30–49 percent	4.5	4.5	4.9	
50-74 percent	4.6	4.6	6.6	
75–100 percent	11.1	11.1	10.2	
Teaching status in 1997				
Still teaching	1.7	1.7	2.3	
No longer teaching	2.4	2.4	4.2	